

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-153. (Canceled)

154. (Currently Amended) A method of manufacturing a semiconductor device comprising:

irradiating a semiconductor film formed over a substrate with a laser light elongated in one direction at an irradiation surface in an atmosphere containing oxygen in a first chamber;

transporting the substrate from the first chamber to a second chamber; and

forming a gate insulating film on the semiconductor film in the second chamber,

wherein the first chamber and the second chamber are connected with each other through a preliminary chamber.

155. (Previously Presented) A method of manufacturing a semiconductor device according to claim 154, wherein the second chamber is a portion of a sputtering apparatus.

156. (Previously Presented) A method of manufacturing a semiconductor device according to claim 154, wherein the laser comprises an excimer laser or a YAG laser.

157. (Currently Amended) A method of manufacturing a semiconductor device according to claim 154, wherein the laser light has a rectangular form at [[an]] said irradiation surface.

158. (Previously Presented) A method of manufacturing a semiconductor device according to claim 154, wherein the gate insulating film comprises a silicon oxide film.

159. (Currently Amended) A method of manufacturing a semiconductor device comprising:

irradiating a semiconductor film formed over a substrate with a laser light elongated in one direction at an irradiation surface in an atmosphere containing oxygen in a first chamber;

transporting the substrate from the first chamber to a second chamber; and
forming a gate insulating film on the semiconductor film in the second chamber, wherein the step of forming the gate insulating film is conducted without exposing to air.

160. (Previously Presented) A method of manufacturing a semiconductor device according to claim 159, wherein the second chamber is a portion of a sputtering apparatus.

161. (Previously Presented) A method of manufacturing a semiconductor device according to claim 159, wherein the laser comprises an excimer laser or a YAG laser.

162. (Currently Amended) A method of manufacturing a semiconductor device according to claim 159, wherein the laser light has a rectangular form at [[an]] said irradiation surface.

163. (Previously Presented) A method of manufacturing a semiconductor device according to claim 159, wherein the gate insulating film comprises a silicon oxide film.

164. (Currently Amended) A method of manufacturing a semiconductor device comprising:

irradiating a semiconductor film formed over a substrate with a laser light elongated in one direction at an irradiation surface in an atmosphere containing oxygen in a first chamber;

transporting the substrate from the first chamber to a second chamber; and

forming a gate insulating film on the semiconductor film in the second chamber,

wherein the first chamber and the second chamber constitute a portion of a multi-chamber apparatus.

165. (Previously Presented) A method of manufacturing a semiconductor device according to claim 164, wherein the second chamber is a portion of a sputtering apparatus.

166. (Previously Presented) A method of manufacturing a semiconductor device according to claim 164, wherein the laser comprises an excimer laser or a YAG laser.

167. (Currently Amended) A method of manufacturing a semiconductor device according to claim 164, wherein the laser light has a rectangular form at [[an]] said irradiation surface.

168. (Previously Presented) A method of manufacturing a semiconductor device according to claim 164, wherein the gate insulating film comprises a silicon oxide film.

169. (Previously Presented) A method of manufacturing a semiconductor device comprising:

irradiating a semiconductor film formed over a substrate with a laser light in an atmosphere containing oxygen in a first chamber;

transporting the substrate from the first chamber to a second chamber;
forming a gate insulating film on the semiconductor film in the second chamber;
transporting the substrate from the second chamber to a third chamber; and
performing a heat treatment in the third chamber,

wherein the first through the third chambers are connected with each other through a preliminary chamber.

170. (Previously Presented) A method of manufacturing a semiconductor device according to claim 169, wherein the second chamber is a portion of a sputtering apparatus.

171. (Previously Presented) A method of manufacturing a semiconductor device according to claim 169, wherein the laser comprises an excimer laser or a YAG laser.

172. (Previously Presented) A method of manufacturing a semiconductor device according to claim 169, wherein the laser light has a rectangular form at an irradiation surface.

173. (Previously Presented) A method of manufacturing a semiconductor device according to claim 169, wherein the heat treatment is conducted in an atmosphere containing hydrogen.

174. (Previously Presented) A method of manufacturing a semiconductor device according to claim 169, wherein the gate insulating film comprises a silicon oxide film.

175. (Previously Presented) A method of manufacturing a semiconductor device comprising:

irradiating a semiconductor film formed over a substrate with a laser light in an atmosphere containing oxygen in a first chamber;
transporting the substrate from the first chamber to a second chamber;
forming a gate insulating film on the semiconductor film in the second chamber;
transporting the substrate from the second chamber to a third chamber; and
performing a heat treatment in the third chamber,
wherein the step of forming the gate insulating film is conducted without exposing to air.

176. (Previously Presented) A method of manufacturing a semiconductor device according to claim 175, wherein the second chamber is a portion of a sputtering apparatus.

177. (Previously Presented) A method of manufacturing a semiconductor device according to claim 175, wherein the laser comprises an excimer laser or a YAG laser.

178. (Previously Presented) A method of manufacturing a semiconductor device according to claim 175, wherein the laser light has a rectangular form at an irradiation surface.

179. (Previously Presented) A method of manufacturing a semiconductor device according to claim 175, wherein the heat treatment is conducted in an atmosphere containing hydrogen.

180. (Previously Presented) A method of manufacturing a semiconductor device according to claim 175, wherein the gate insulating film comprises a silicon oxide film.

181. (Previously Presented) A method of manufacturing a semiconductor device comprising:

irradiating a semiconductor film formed over a substrate with a laser light in an atmosphere containing oxygen in a first chamber;

transporting the substrate from the first chamber to a second chamber;

forming a gate insulating film on the semiconductor film in the second chamber;

transporting the substrate from the second chamber to a third chamber; and

performing a heat treatment in the third chamber,

wherein the first through the third chambers constitute a portion of a multi-chamber apparatus.

182. (Previously Presented) A method of manufacturing a semiconductor device according to claim 181, wherein the second chamber is a portion of a sputtering apparatus.

183. (Previously Presented) A method of manufacturing a semiconductor device according to claim 181, wherein the laser comprises an excimer laser or a YAG laser.

184. (Previously Presented) A method of manufacturing a semiconductor device according to claim 181, wherein the laser light has a rectangular form at an irradiation surface.

185. (Previously Presented) A method of manufacturing a semiconductor device according to claim 181, wherein the heat treatment is conducted in an atmosphere containing hydrogen.

186. (Previously Presented) A method of manufacturing a semiconductor device according to claim 181, wherein the gate insulating film comprises a silicon oxide film.